# **Bay Area Air Quality Management District**

939 Ellis Street San Francisco, CA 94109 (415) 771-6000

# **Final**

# MAJOR FACILITY REVIEW PERMIT

# Issued To: University of California, Berkeley Facility #A0059

## **Facility Address:**

University of California Campus Berkeley, CA 94720

# **Mailing Address:**

2000 Carleton Street Berkeley

**Responsible Official** 

Robert M. Berdahl Chancellor (510) 987-9765 **Facility Contact** 

Karl Hans

Office of Environmental, Health and Safety (510) 642-3073

Type of Facility:	University	<b>BAAQMD Permit Division Contact:</b>
Primary SIC:	8221	Eric Chan
Product:	Education/Research	

## ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Singed by Ellen Garvey	November 18, 1999	
Ellen Garvey, Executive Officer/Air Pollution Control Officer	Date	

# TABLE OF CONTENTS

I.	STANDARD CONDITIONS	3
II.	EQUIPMENT LIST	7
	A. PERMITTED SOURCE LIST	7
III.	GENERALLY APPLICABLE EMISSION REQUIREMENTS	8
IV.	SOURCE-SPECIFIC APPLICABLE REQUIREMENTS	10
V.	SCHEDULE OF COMPLIANCE	17
VI.	PERMIT CONDITIONS	17
	A. SOURCE SPECIFIC PERMIT CONDITIONS	17
	B. FACILITY-WIDE PERMIT CONDITIONS	23
VII.	APPLICABLE EMISSION LIMITS & COMPLIANCE MONITORING REQUIREMENTS	24
VIII.	TEST METHODS	31
IX.	GLOSSARY	36
X.	APPENDIX A - APPLICABLE STATE IMPLEMENTATION PLAN	40

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

## I. STANDARD CONDITIONS

## A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations:

BAAQMD Regulation 1 - General Provisions and Definitions

(as amended by the District Board on 10/7/98);

SIP Regulation 1 - General Provisions and Definitions

(as approved by EPA through 8/27/99);

BAAQMD Regulation 2, Rule 1 - Permits, General Requirements

(as amended by the District Board on 10/7/98);

SIP Regulation 2, Rule 1 - Permits, General Requirements

(as approved by EPA through 6/23/95);

BAAQMD Regulation 2, Rule 2 - Permits, New Source Review

(as amended by the District Board on 10/7/98);

SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration

(as approved by EPA through 10/19/84); and

BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking

(as amended by the District Board on 10/7/98).

SIP Regulation 2, Rule 4 - Permits, Emissions Banking

(as approved by EPA through 1/26/99).

## B. Conditions to Implement Regulation 2, Rule 6, Major Facility Review

- 1. This Major Facility Review Permit was issued on December 18, 1998 and expires on December 18, 2003. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than June 18, 2003 and no earlier than December 18, 2002. If a complete application for renewal has not been submitted in accordance with these deadlines, the facility may not operate after December 18, 2003. (Regulation 2-6-307, 404.2, & 409.6; MOP Volume II, Part 3, §4.2)
- 2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)
- 3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)
- 4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

## I. Standard Conditions (continued)

- 5. The filing of a request by the facility for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 6. This permit does not convey any property rights of any sort, nor any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
- 8. Any records required to be maintained pursuant to this permit which the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
- 9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B Public Information, Confidentiality of Business Information. (40 CFR Part 2)
- 10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)

### C. Requirement to Pay Fees

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

## **D.** Inspection and Entry

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment which is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

### E. Records

Notwithstanding the specific wording in any requirement, all records for federally

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

## I. Standard Conditions (continued)

enforceable requirements shall be maintained for at least five years from the date of entry. (Regulation 2-6-501, Regulation 3; MOP Volume II, Part 3, §4.7)

### F. Monitoring Reports

All required monitoring reports must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. Monitoring reports shall be prepared for the following periods: December 19th through May 18th and May 19th through December 18th, and are due on the 18th day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

Director of Compliance and Enforcement Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109 Attn: Title V Reports

(Regulation 2-6-502, Regulation 3; MOP Volume II, Part 3, §4.7)

### **G.** Compliance Certification

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification period will be December 19th to December 18th of the following year. The certification shall be submitted by January 18th of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification should be sent to the Environmental Protection Agency at the following address:

Director of the Air Division USEPA, Region IX 75 Hawthorne Street San Francisco, CA 94105

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

## I. Standard Conditions (continued)

Attention: Air-3

(MOP Volume II, Part 3, §4.5 and 4.15)

### **H.** Emergency Provisions

- 1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)
- 2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit caused by conditions beyond the permit holder's reasonable control by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. Any variance granted by the Hearing Board from any term or condition of this permit which lasts longer than 90 days will be subject to EPA approval. (MOP Volume II, Part 3, §4.8)
- 3. Notwithstanding the foregoing, the granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement. (MOP Volume II, Part 3, §4.8)

## I. Severability

1. In the event that any provision of this permit is invalidated by a court or tribunal of competent jurisdiction, or by the Administrator of the EPA, all remaining portions of the permit shall remain in full force and effect. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

# II. EQUIPMENT LIST

# **A.** Permitted Source List

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits.

**Table II-A** 

S-#	Description	Make or Type	Model	Capacity
S-2	Boiler #2 (natural gas, diesel	Union Iron Works	FGR and	137 MMBTU/HR
	oil)		Low NOx	
S-3	Boiler #3 (natural gas, diesel	Erie City	FGR and	135 MMBTU/HR
	oil)		Low NOx	
S-4	Boiler #4 (natural gas, diesel	Erie City	FGR and	135 MMBTU/HR
	oil)		Low NOx	
S-47	Lithographic Printing Press	Miller	TP95	5 color
S-48	Lithographic Printing Press	Miller	TP95	5 color
S-50	Lithographic Printing Press	Miller	TP95	5 color
S-51	Lithographic Printing Press	Heidelberg	102	6 color
S-59	Lithographic Printing Press	Heidelberg	MO	2 color
S-61	Envelope Printing Press	Halm	Superjet	
S-100	Miscellaneous Painting	varies	varies	varies
	Operations:			
	MCB Barker Koshland ASU			
	Dept of Physics			
	Psychology Dept			
	College of Chemistry			
	Lawrence Hall			
	Mechanical Engineering			

ID: EYC

# III. GENERALLY APPLICABLE EMISSION REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements would not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit.

The dates in parenthesis in the Title column identify the versions of the regulations being cited and are, as applicable:

- BAAQMD regulation(s):
   The date(s) of adoption or most recent amendment of the regulation by the District Board
- 2. Any federal requirement, including a version of a District regulation that has been approved into the SIP:

The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full language of SIP requirements is included in Appendix A of this permit if the SIP requirement is different from the current BAAQMD requirement.

## **NOTE:**

There are differences between current BAAQMD rules and versions of the rules in the SIP. For specific information, contact the District's Rule Development Section of the Enforcement Division. All sources must comply with <u>both</u> versions of a rule until the U.S. EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

Table III

		Federally
Applicable	Regulation Title or	Enforceable
Requirement	Description of Requirement	(Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (10/7/98)	N
SIP Regulation 1	General Provisions and Definitions (8/27/99)	Y
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/90)	Y

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

# III. Generally Applicable Emission Requirements (continued)

**Table III** 

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 5	Open Burning (11/2/94)	Y
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	Y
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (12/20/95)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (12/20/95)	N
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (12/4/91)	Y
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	Y
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone (2/21/95)	
Subpart F, 40 CFR 82.156	Leak Repair	Y
Subpart F, 40 CFR 82.161	Certification of Technicians	Y
Subpart F, 40 CFR 82.166	Records of Refrigerant	Y

There are differences between the current BAAQMD rule and the version of the rule in the SIP. For specific information, contact the District's Rule Development Section of the Enforcement Division. All sources must comply with <u>both</u> versions of the rule until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

Expiration Date: December 18, 2003

ID: EYC

# IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. The requirements cited in the following tables apply in a specific manner to the indicated source(s).

The dates in parenthesis in the Title column identify the versions of the regulations being cited and are, as applicable:

- BAAQMD regulation(s):
   The date(s) of adoption or most recent amendment of the regulation by the District Board
- 2. Any federal requirement, including a version of a District regulation that has been approved into the SIP:

The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. The full language of SIP requirements is included in Appendix A of this permit if the SIP requirements are different from the current BAAQMD requirements. All other text may be found in the regulations themselves.

Table IV-A S-2, Steam Generator Boiler S-3, Steam Generator Boiler S-4, Steam Generator Boiler

Applicable Requiremen t	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Particulate Matter and Visible Emissions (12/19/90)		
Regulation 6			
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	

Permit for Site #: A0059 Expiration Date: December 18, 2003

ID: EYC

# IV. Source-Specific Applicable Requirements (continued)

Table IV-A (continued) S-2, Steam Generator Boiler S-3, Steam Generator Boiler S-4, Steam Generator Boiler

Applicable Requiremen t	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD			
Regulation	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)		
9, Rule 1			
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
BAAQMD	Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon		
Regulation	Monoxide from Industrial, Institutional, and Commercial		
9, Rule 7	Boilers, Steam Generators, and Process Heaters (9/16/92)		
9-7-301	Emission Limits - Gaseous Fuels	Y	
9-7-301.1	NOx Emission Limit	Y	
9-7-301.2	CO Emission Limit	Y	
9-7-302	Emission Limits - Non-Gaseous Fuel	Y	
9-7-302.1	NOx Emission Limit	Y	
9-7-302.2	CO Emission Limit	Y	
9-7-303	Emission Limits	Y	
9-7-305	Natural Gas Curtailment - Non-Gaseous Fuel	Y	
9-7-305.1	NOx Emission Limits	Y	
9-7-305.2	CO Emission Limits	Y	
9-7-306	Equipment Testing	Y	
9-7-306.1	NOx Emission Limits	Y	
9-7-306.2	CO Emission Limits	Y	
9-7-306.3	Equipment Testing	Y	
9-7-503	Records	Y	
9-7-503.2	Natural Gas Curtailment Records	Y	
9-7-503.3	Equipment Testing Records	Y	
9-7-503.4	Source Test Records and Record Retention	Y	
9-7-603	Compliance Determinations	Y	

Permit for Site #: A0059
Expiration Date: December 18, 2003

Expiration Date: December 18, 2003 ID: EYC

# IV. Source-Specific Applicable Requirements (continued)

Table IV-A (continued)

S-2, Steam Generator Boiler

S-3, Steam Generator Boiler

S-4, Steam Generator Boiler

Applicable Requiremen t	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD			
Condition			
#14330			
Part 1	Constraints on operation of Sources 2, 3, 4 (basis:	Y	
	Cumulative Increase)		
Part 2	Fuel Oil Sulfur Content (basis: BACT)	Y	
Part 3	Sulfur Content Limit During Natural Gas Curtailment (basis:	Y	
	Cumulative Increase)		
Part 4	Recordkeeping (basis: BAAQMD Regulation 2-6-501)	Y	
Part 5	Source Testing (basis: BAAQMD Regulation 2-6-501)	Y	
Part 6	Visible Emissions Monitoring	Y	

Permit for Site #: A0059 Expiration Date: December 18, 2003

ID: EYC

# IV. Source-Specific Applicable Requirements (continued)

# Table IV-B S-47, Lithographic Press, S-48, Lithographic Press, S-50, Lithographic Press, S-51, Lithographic Press, S-59, Lithographic Press, S-61 Envelope Press

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Organic Compounds - Graphic Arts Printing and Coating		
Regulation	<b>Operations</b> (3/3/99)		
8, Rule 20			
8-20-302	Flexographic, Gravure, Letterpress, and Lithographic Requirements	Y	
8-20-304	Alternative Emission Control Plan	Y	
8-20-309	Cleaning Product Requirements	N	1/1/2000
8-20-320	Solvent Evaporative Loss Minimization	Y	
8-20-501	Records	Y	
8-20-602	Determination of Emissions	Y	
BAAQMD Condition #16360			
part 1	Annual emissions limitation (basis: Cumulative Increase)	Y	
part 2	Cleanup solvent VOC limitation (basis: BACT)	Y	
part 3	VOC ink limitation (basis: BACT)	Y	
part 4	VOC fountain solution limitation (basis: BACT)	Y	
part 5	Record requirements (basis: Cumulative increase, BACT)	Y	

Permit for Site #: A0059

Expiration Date: December 18, 2003 ID: EYC

# IV. Source-Specific Applicable Requirements (continued)

Table IV-C S-100, Miscellaneous Painting Operations

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Organic Compounds - Surface Coating of Miscellaneous		
Regulation	Metal Parts and Products (12/20/95)		
8, Rule 19			
8-19-110	Exemption - Low Usage Coatings	Y	
8-19-112	Exemption - Touch Up	Y	
8-19-113	Exemption - Specific Operations	Y	
8-19-117	Exemption - Stencil Coating	Y	
8-19-133	Exemption - Spray Application Equipment	Y	
8-19-134	Exemption - Coating Records	Y	
8-19-136	Limited Exemption - Specialty Coatings	Y	
8-19-302	VOC Limits	Y	
8-19-312	Specialty Coating Limitations	Y	
8-19-320	Solvent Evaporative Loss Minimization	Y	
8-19-405	Low Usage Coating Petition	Y	
8-19-407	Specialty Coating Petition	Y	
8-19-501	Records	Y	
BAAQMD	Organic Compounds - Coating of Flat Wood Paneling and		
Regulation	Wood Flat Stock (12/20/95)		
8, Rule 23			
8-23-301	VOC Limits	Y	
8-23-401	Coating List Requirement	Y	
8-23-501	Records	Y	
BAAQMD	Organic Compounds - Surface Coating of Plastic Parts and		
Regulation	Products (12/20/95)		
8, Rule 31			
8-31-110	Limited Exemption , Adhesives	Y	
8-31-111	Limited Exemption, Low Usage Coatings	Y	
8-31-113	Limited Exemption, Aerosol Cans	Y	
8-31-118	Limited Exemption, Automobile Assembly Coatings	Y	
8-31-120	Limited Exemption, Test Panels	Y	
8-31-121	Limited Exemption, Stencil Coatings	Y	
8-31-122	Limited Exemption, Spray Application Equipment	Y	

Permit for Site #: A0059 Expiration Date: December 18, 2003

ID: EYC

# IV. Source-Specific Applicable Requirements (continued)

Table IV-C S-100, Miscellaneous Painting Operations

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement		(Y/N)	Date
8-31-123	Limited Exemption, Small User	Y	
8-31-124	Limited Exemption, Coating Records	Y	
8-31-125	Limited Exemption, Printed Circuit Boards	Y	
8-31-126	Limited Exemption, Translucent Coatings	Y	
8-31-302	VOC Limit	Y	
8-31-306	Flexible Coatings	Y	
8-31-307	Prohibition of Specification	Y	
8-31-308	Compliance Statement Requirements	N	
8-31-309	VOC Limits	Y	
8-31-310	Equipment Requirements	Y	
8-31-320	Solvent Minimization Requirements	Y	
8-31-401	Coating Petition	Y	
8-31-403	Low Usage Coating Petition	Y	
8-31-501	Records	Y	
BAAQMD	Organic Compounds-Wood Products Coating (12/20/95)		
Regulation			
8, Rule 32			
8-32-111	Limited Exemption, Small Coating Operations	Y	
8-32-112	Limited Exemption, Specific Operations	Y	
8-32-113	Limited Exemption, Refinishing, Replacement and Custom	Y	
	Replica Furniture Operations		
8-32-114	Limited Exemption, Stencil Coatings	Y	
8-32-115	Limited Exemption, Specific Finishes	Y	
8-32-116	Limited Exemption, Musical Instruments	Y	
8-32-117	Limited Exemption, Polyester Resin Application	Y	
8-32-118	Limited Exemption, Patternmaking	Y	
8-32-119	Limited Exemption, Extreme Environmental Coating	Y	
8-32-120	Limited Exemption, Recordkeeping Exemption, Low VOC	Y	
8-32-301	Spray Application Equipment Limitation	Y	
8-32-302	VOC Limits	Y	
8-32-303	VOC Limits - Custom Cabinetry and Architectural Millwork	Y	
8-32-304	VOC Limits - Custom and Contract Furniture Limits	Y	
8-32-305	Prohibition of Sale	N	
8-32-306	Compliance Statement	Y	

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

# IV. Source-Specific Applicable Requirements (continued)

Table IV-C S-100, Miscellaneous Painting Operations

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
8-32-307	Alternate Compliance	Y	
8-32-320	Solvent Evaporative Loss Minimization	Y	
8-32-403	Extreme Environmental Petition	N	
8-32-404	Alternative Compliance	Y	
8-32-405	Low VOC Facility Certification	Y	
8-32-501	Records, Approved Emission Control System,	Y	
8-32-502	Records, Burden of Proof	Y	
BAAQMD	Organic Compounds - Aerosol Paint Products (12/20/95)		
Regulation			
8, Rule 49			
8-49-110	Limited Exemption, Non-Paint Aerosol Products	Y	
8-49-301	VOC Limits	Y	
8-49-302	Prohibition of Non-intended Use	Y	
8-49-303	Multi-Component Applications	Y	
8-49-401	Labeling Requirements	Y	
8-49-402	Duplicate Specification Standards	Y	
8-49-501	Records	Y	
BAAQMD			
Condition #			
14090			
part 1	Annual coating use limitation (basis: Cumulative Increase)	Y	
part 2	Cleanup solvent limitation (basis: Cumulative Increase)	Y	
part 3	Record Requirements (basis: Cumulative Increase, BACT)	Y	

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

## V. SCHEDULE OF COMPLIANCE

The permit holder shall continue to comply with all applicable requirements cited in this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit.

## VI. PERMIT CONDITIONS

Any condition that is preceded by an asterisk is not federally enforceable.

## A. Source Specific Permit Conditions

**Condition #14330,** Modified 10-04-96 and 11-9-99 Sources 2, 3, and 4 at Facility #A0059:

- 1. The existing boilers at Facility No. A0059, Sources 2, 3, and 4 shall operate\* only during periods when the Gas Turbine (S-40) and Duct Burner (S-41) at Facility # B1326 are not operating, except in the following cases:
  - a. during switch-over periods.
  - b. if the steam demand of the campus exceeds the 120,000 lb/hr design rate available from the gas turbine and duct burners, then the existing boilers may fire only to the extent necessary to satisfy campus steam demands, up to a rolling annual average of 95,000 lbm/hr. This limit on the existing boilers will go into effect when the cogeneration plant begins operation and will not apply when the cogeneration plant is non-operative.
  - c. If either Source 40 Gas Turbine; Facility # B1326, or Source 41, Duct burner; Facility #B1326, malfunctions and the cogeneration system can not meet the 120,000 lb/hr steam rate, then the existing boilers may fire only to the extent necessary to satisfy the campus steam demands. The duct burners will not operate when the gas turbine is not operational, except during switch-over periods.
- \* "Operation" for the purposes of this condition refers only to firing of fuel in the boiler; hot

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

# VI. Permit Conditions (continued)

# A. Source Specific Permit Conditions (continued)

standby maintained with steam does not constitute operation. (basis: BACT)

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

## VI. Permit Conditions (continued)

# A. Source Specific Permit Conditions (continued)

**Condition #14330,** Modified 10-04-96 and 11-9-99 Sources 2, 3, and 4 at Facility #A0059:

- 2. Any fuel oil used as a primary fuel in Source 2, 3 and 4 shall not exceed a maximum sulfur content of 0.12% (by weight). Compliance shall be determined from fuel samples taken and analyzed using the District's Laboratory Procedure Method 10. Such fuel oil use shall not exceed the equivalent of 85 days per year at full-load operation of the S-40, gas turbine, and S-41, duct burner, at Facility B1326. (basis: BACT)
- 3. During periods of PG&E curtailment of natural gas, the maximum sulfur content of the fuel oil burned shall not exceed 0.25% (by weight), provided that the gas turbine, S40 at Facility #B1326 was being fired on natural gas prior to the curtailment. (basis: BACT)
- 4. All records associated with the above conditions shall be retained by Purenergy, (Facility # B1326) for at least for at least five years, for review by the District and shall be supplied to the District upon request. The recording format for conditions number 2, and 3 shall be subject to the approval of the APCO. (basis: BAAQMD Regulation 2-6-501)
- 5. Every 8,000 hours of operation a source test of Boilers 2, 3, and 4 shall be conducted to verify compliance with above NOx and CO emission limits and Regulation 9 Rule 7 Limitations. (basis: BAAQMD Regulation 2-6-501)
- 6. If any boiler, S2, S3, or S4, is fired on fuel oil more than 200 hours in any consecutive twelve-month period, on the first day of oil firing following the accumulation of 200 hours, and on the first day following every 1000 hours of cumulative operation afterwards during a twelve-month period, the permit holder shall conduct a visible emission inspection of the stack gas effluent. This visible emissions inspection shall be conducted during daylight hours while the gas turbine is firing on fuel, but need not be conducted by a trained observer. [basis: Reg 6-301, Reg 2-6-501]

If any visible emissions, excluding condensed water vapor, are detected during an inspection and the emissions are observed continuously or intermittently for more than three minutes, the permit holder shall either take corrective action that eliminates the visible emissions and report the visible emissions as a potential exceedance, or have

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

## VI. Permit Conditions (continued)

# A. Source Specific Permit Conditions (continued)

**Condition #14330,** Modified 10-04-96 and 11-9-99 Sources 2, 3, and 4 at Facility #A0059:

a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures outlined in the CARB manual, "Visible Emissions Evaluation." The certified smoke reader shall continue to conduct the Method 9 or CARB Visible Emission Evaluation on a daily basis on every subsequent day that oil is fired until the daily reading shows compliance with the applicable limit.

The permit holder shall record and maintain the following records for each day of any fuel oil firing of gas turbine:

calendar day;

total elapsed time of fuel oil firing;

running 12-month total accumulated time of fuel oil firing;

if 12-month total exceeds 200 hours or for every 1000 hours of cumulative operation during a 12-month period: name of inspector, time inspection was made, presence of visible emissions, description of corrective action taken to abate visible emissions, date and time visible emissions were abated.

All records made pursuant to the above shall be retained for five (5) years and shall be made available to District personnel upon request.

### **Condition #14090**

For S-100 at Facility #A0059:

- 1. The total amount of non-water based coating used at Source 100, miscellaneous painting operations, shall not exceed 80 gallons during any consecutive twelve month period. The total amount of water based coating used at Source 100 shall not exceed 250 gallons during any consecutive twelve month period All coating usage must meet the requirements of the Districts Regulation 8 coatings rules. (basis: Cumulative Increase)
- 2. The net amount of cleanup and surface preparation solvent used at Source 100 shall not exceed 10 gallons during any consecutive twelve month period. The net amount of organic thinner used at Source 100 shall not exceed 10 gallons during any consecutive

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

# VI. Permit Conditions (continued)

# A. Source Specific Permit Conditions (continued)

twelve month period. (basis: BAAQMD Regulation 2-6-501)

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

## VI. Permit Conditions (continued)

# A. Source Specific Permit Conditions (continued)

### Condition #14090

For S-100 at Facility #A0059:

- 3. To demonstrate compliance with the above conditions, the operator shall maintain the following records in a District-approved log: (basis: Cumulative Increase)
  - a. net clean-up solvent used at Source 100, in gallons/day
  - b. total surface preparation solvent used at Source 100, in gallons/day
  - c. cumulative monthly totals of above daily usage rates, in gallons/month
  - d. all applicable coating and thinner usages as specified in Regulation 8 rules

These records shall be kept on site and made available for District inspection for a period of five years from the date on which a record is made.

### **Condition #16360**

Sources 47, 48, 49, 50, 51, 59, and 61 at Facility #A0059:

- 1. The total amount of precursor organic emissions from these presses (Presses S-47, S-48, S-50, S-51, S-59, and S-61) shall not exceed 17.56 tons during any consecutive 12 month period. [Basis: Cumulative Increase]
- 2. The organic cleanup solvent used at these sources (Presses S-47, S-48, S-50, S-51, S-59, and S-61) shall have a VOC content of not more than 7.5 lb VOC/gal and VOC vapor pressure of not more than 25 mm Hg, or is not more than 30% by volume VOC. [Basis: BACT]
- 3. The inks and coatings used at these sources (Presses S-47, S-48, S-50, S-51, S-59, and S-61) shall have a VOC content of not more than 2.5 lb VOC/gal. [Basis: BACT and BAAQMD Regulation 8 Rule 20]
- 4. The fountain solutions used at these sources (Presses S-47, S-48, S-50, S-51, S-59, and S-61) shall have a VOC content of not more than 8% by volume. [Basis: BACT and BAAQMD Regulation 8 Rule 20]

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

## VI. Permit Conditions (continued)

## A. Source Specific Permit Conditions (continued)

### **Condition #16360**

Sources 47, 48, 49, 50, 51, 59, and 61 at Facility #A0059:

- 5. In order to demonstrate compliance with the above conditions the following records shall be maintained in a District Approved log. These records shall be kept on site and made available for inspection by District personnel for a period of 24 months from the date on which a record is made. [Basis: Recordkeeping]
  - a. A current list of all inks, coatings, fountain solutions, and solvents in use which states the VOC content of each
  - A facility-wide monthly record including the name, VOC content, and amount used each month for each category of ink, coating, fountain solution, and cleanup solvent
  - c. The resulting POC emissions calculated from the above records. The 12-month overall POC emission shall be totaled on a monthly basis.

# **B.** Facility-wide Permit Conditions

None.

Expiration Date: December 18, 2003

ID: EYC

# VII. APPLICABLE EMISSION LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included only to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown, either annual (A), quarterly (Q), monthly (M), daily (D), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

Table VII-A S-2, Steam Generator Boiler S-3, Steam Generator Boiler S-4, Steam Generator Boiler

	Emission		Future		Monitoring	Monitoring	
	Limit	FE	Effective		Requirement	Frequency	Monitoring
Pollutant	Citation	Y/N	Date	<b>Emission Limit</b>	Citation	(P/C/N)	Type
NOX	BAAQM	Y		30 ppmv @	BAAQMD	P/every 8000	Source test
	D			3% O2, dry	condition	hours of	
	Regulatio				#14330, part 5	operation	
	n 9-7-						
	301.1						
	BAAQM	Y		40 ppmv @	BAAQMD	P/every 8000	Source test
	D			3% O2, dry	condition	hours of	
	Regulatio				#14330, part 5	operation	
	n 9-7-						
	302.1						
CO	BAAQM	Y		400 ppmv @	BAAQMD	P/every 8000	Source test
	D			3% O2, dry	condition	hours of	
	Regulatio				#14330, part 5	operation	
	n 9-7-						
	301.2						

Permit for Site #: A0059 Expiration Date: December 18, 2003 ID: EYC

# VII. Applicable Emission Limits & Compliance Monitoring Requirements (continued)

	BAAQM D	Y	400 ppmv @ 3% O2, dry	BAAQMD condition	P/every 8000 hours of	Source test
	Regulatio		270 02, 41,	#14330, part 5	operation	
	n 9-7-					
	302.2					
SO2	BAAQM	Y	GLC <sup>1</sup> of 0.5 ppm for		N	
	D		3 min or 0.25 ppm			
	Regulatio		for 60 min or 0.05			
	n 9-1-301		ppm for 24 hours			

Table VII-A (continued)

S-2, Steam Generator Boiler

S-3, Steam Generator Boiler

S-4, Steam Generator Boiler

	Emission Limit	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Pollutant	Citation	Y/N	Date	Emission Limit	Citation	(P/C/N)	Type
SO2	BAAQM	Y		300 ppm (dry)	BAAQMD	P/every 8000	Source test
	D				condition	hours of	
	Regulatio				#14330, part 5	operation	
	n 9-1-302						
	BAAQM	Y		Sulfur content of	BAAQMD	P/E	Fuel
	D			fuel < 0.5% by	condition		Analysis
	Regulatio			weight	#14330, part 5		
	n 9-1-304						
	BAAQM	Y		Sulfur content of	BAAQMD	P/E	Fuel
	D			fuel < 0.12% by	condition		Analysis
	cond			weight	#14330, part 5		
	#14330,						
	part 2						
	BAAQM	Y		Sulfur content of	BAAQMD	P/E	Fuel
	D			fuel < 0.25% by	condition		Analysis
	cond			weight during	#14330, part 5		
	#14330,			natural gas			
	part 3			curtailment			

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

# VII. Applicable Emission Limits & Compliance Monitoring Requirements (continued)

Table VII-A (continued)

S-2, Steam Generator Boiler

S-3, Steam Generator Boiler

S-4, Steam Generator Boiler

	Emission Limit	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Pollutant	Citation	Y/N	Date	<b>Emission Limit</b>	Citation	(P/C/N)	Type
TSP	BAAQM	N		Ringelmann No. 1		N	
	D					during	
	Regulatio					natural gas	
	n 6-301					firing	
	BAAQM	N		Ringelmann No. 1	BAAQMD	P/E when	visible
	D				cond #14330,	burning fuel	emissions
	Regulatio				part 6	oil	monitoring
	n 6-301						
	BAAQM	Y		0.15 grain/dscf		N	
	D			@ 6% O2			
	Regulatio						
	n 6-310						

<sup>&</sup>lt;sup>1</sup> Ground Level Concentration

Permit for Site #: A0059 Expiration Date: December 18, 2003

ID: EYC

Table VII-B S-47, Lithographic Press, S-48, Lithographic Press S-50, Lithographic Press, S-51, Lithographic Press S-59, Lithographic Press, S-61, Envelope Press

	Emission		Future		Monitoring	Monitoring	
	Limit	FE	Effective		Requirement	Frequency	Monitoring
Pollutant	Citation	Y/N	Date	<b>Emission Limit</b>	Citation	(P/C/N)	Type
VOC	BAAQMD	Y		VOC content of ink <	8-20-503	P/M	Records
	Regulation			2.5 lb/gal			
	8-20-302						
	BAAQMD	Y		VOC content of	8-20-503	P/M	Records
	Regulation			coating < 2.5 lb/gal			
	8-20-302						
	BAAQMD	Y		VOC content of	8-20-503	P/M	Records
	Regulation			adhesive < 1.25			
	8-20-302			lb/gal			
	BAAQMD	Y		VOC content of web	8-20-503	P/M	Records
	Regulation			splicing adhesive <			
	8-20-302			2.5 lb/gal			
	BAAQMD	N	1/1/2000	Lithographic,	8-20-503	P/M	Records
	Regulation			Blanket and Roller Washes shall not			
	8-20-309			contain > 2.5 lb/gal			
				VOC or shall have a			
				VOC partial pressure			
				of 10 mmHg			
VOC	BAAQMD	N	1/1/2000	Lithographic, Other	8-20-503	P/M	Records
	Regulation			Cleaners shall not			
	8-20-309			contain > 2.5 lb/gal			
				VOC or shall have a			
				VOC partial pressure			
				of 25 mmHg			
	BAAQMD	Y		throughput limit:	cond. #16360,	P/M	Records
	cond			17.56 tons total for	part 5		
	#16360,			all presses			
	part 1						

Permit for Site #: A0059 Expiration Date: December 18, 2003

xpiration Date: December 18, 2003
ID: EYC

Table VII-B S-47, Lithographic Press, S-48, Lithographic Press S-50, Lithographic Press, S-51, Lithographic Press S-59, Lithographic Press, S-61, Envelope Press

	Emission Limit	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Pollutant	Citation	Y/N	Date	Emission Limit	Citation	(P/C/N)	Type
VOC	BAAQMD	Y		cleanup solvent VOC	cond. #16360,	P/E	Records
	cond			content < 7.5 lb/gal	part 5		
	#16360,			and < 25 mmHg			
	part 2			vapor pressure or			
				solvent shall not			
				contain > 30% VOC			
	BAAQMD	Y		inks and coatings	cond. #16360,	P/E	Records
	cond			shall not contain	part 5		
	#16360,			more than 2.5 lb/gal			
	part 3			VOC			
	BAAQMD	Y		fountain solution	cond. #16360,	P/E	Records
	cond			shall not contain	part 5		
	#16360,			more than 8% VOC			
	part 4			by volume			

Permit for Site #: A0059 Expiration Date: December 18, 2003

ID: EYC

Table VII-C S-100, Miscellaneous Painting Operations

	Emission		Future		Monitoring	Monitoring	
	Limit	FE	Effective		Requirement	Frequency	Monitoring
Pollutant	Citation	Y/N	Date	Emission Limit	Citation	(P/C/N)	Type
VOC	BAAQMD	Y		content of air dried	Regulation	P/W or M	Records
	Regulation			coating < 2.8 lbs/gal	8-19-501		
	8-19-302			e e			
	BAAQMD	Y		content of coatings	Regulation	P/W or M	Records
	Regulation			< specified VOC	8-19-501		
	8-19-312			content			
	BAAQMD	Y		content of coatings	Regulation	P/D	Records
	Regulation			< 2.1 lbs/gal	8-23-501		
	8-23-301						
	BAAQMD	Y		content of coatings	Regulation	P/W or M	Records
	Regulation			< specified VOC	8-31-501		
	8-31-302			content			
	BAAQMD	Y		content of coatings	Regulation	P/W or M	Records
	Regulation			< specified VOC	8-31-501		
	8-31-306			content			
	BAAQMD	Y		content of coatings	Regulation	P/W or M	Records
	Regulation			< specified VOC	8-31-501		
	8-31-309			content			
	BAAQMD	Y		content of coatings	Regulation	P/D	Records
	Regulation			< specified VOC	8-32-501		
	8-32-302			content			
	BAAQMD	Y		content of coatings	Regulation	P/M	Records
	Regulation			< specified VOC	8-32-502		
	8-32-303			content			
	BAAQMD	Y		content of coatings		N	
	Regulation			< specified VOC			
	8-49-301			content			
VOC	BAAQMD	Y		throughput limit:	cond. #14090,	P/M	Records
	cond			250 gallons/year	part 3		
	#14090,						
	part 1						

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

cond.		throughput limit:	cond. #14090,	P/D	Records
#14090,		10 gallons/year	part 3		
part 2					

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

# VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally found in Section 600 of the regulation. The following table indicates only the test methods associated with the emission limits referenced in Section VIII - Applicable Emission Limits & Compliance Monitoring Requirements, of this permit.

## **Table VIII**

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume 1, Evaluation of Visible
Regulation 6-301		Emissions
BAAQMD	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates
Regulation 6-310		Sampling
BAAQMD	General Operations	Manual of Procedures, Volume IV, ST-15, Particulates
Regulation		Sampling
6-311		
BAAQMD	VOC Limits	Manual of Procedures, Volume III, Method 21,
Regulation		Determination of Compliance of Volatile Organic
8-19-302		Compounds for Water Reducible Coatings or
		Manual of Procedures, Volume III, Method 22,
		Determination of Compliance of Volatile Organic
		Compounds for Solvent Based Coatings
		Manual of Procedures, Volume III, Method 31,
		Determination of Precursor Organic Compounds in Paint
		Strippers for Aerospace Assembly and Component Coating
		Operations

Facility Name: University of California, Berkeley Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

# VIII. Test Methods (continued)

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Specialty Coating Limitations	Manual of Procedures, Volume III, Method 21,
Regulation		Determination of Compliance of Volatile Organic
8-19-312		Compounds for Water Reducible Coatings or
		Manual of Procedures, Volume III, Method 22,
		Determination of Compliance of Volatile Organic
		Compounds for Solvent Based Coatings
BAAQMD	VOC Limits - Lithographic	Manual of Procedures, Volume III, Method 21,
Regulation	Presses	Determination of Compliance of Volatile Organic
8-20-302		Compounds for Water Reducible Coatings or
		Manual of Procedures, Volume III, Method 22,
		Determination of Compliance of Volatile Organic
		Compounds for Solvent Based Coatings or
		EPA Method 24, Determination of Volatile Matter Content,
		Water Content, Density, Volume Solids, and Weight Solids
		of Surface Coatings or
		EPA Method 24A, Determination of Volatile Matter Content
		and Density of Printing Inks and Related Coatings
BAAQMD	VOC Limits	Manual of Procedures, Volume III, Method 21,
Regulation		Determination of Compliance of Volatile Organic
8-23-301		Compounds for Water Reducible Coatings or
		Manual of Procedures, Volume III, Method 22,
		Determination of Compliance of Volatile Organic
		Compounds for Solvent Based Coatings
BAAQMD	VOC Limit	Manual of Procedures, Volume III, Method 21,
Regulation		Determination of Compliance of Volatile Organic
8-31-302		Compounds for Water Reducible Coatings or
		Manual of Procedures, Volume III, Method 22,
		Determination of Compliance of Volatile Organic
		Compounds for Solvent Based Coatings
		Manual of Procedures, Volume III, Method 31,
		Determination of Precursor Organic Compounds in Paint
		Strippers for Aerospace Assembly and Component Coating
		Operations

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

# VIII. Test Methods (continued)

Applicable		
Requirement	<b>Description of Requirement</b>	Acceptable Test Methods
BAAQMD	Flexible Coatings	Manual of Procedures, Volume III, Method 21,
Regulation		Determination of Compliance of Volatile Organic
8-31-306		Compounds for Water Reducible Coatings or
		Manual of Procedures, Volume III, Method 22,
		Determination of Compliance of Volatile Organic
		Compounds for Solvent Based Coatings
BAAQMD	VOC Limits	Manual of Procedures, Volume III, Method 21,
Regulation		Determination of Compliance of Volatile Organic
8-31-309		Compounds for Water Reducible Coatings or
		Manual of Procedures, Volume III, Method 22,
		Determination of Compliance of Volatile Organic
		Compounds for Solvent Based Coatings
BAAQMD	VOC Limits	Manual of Procedures, Volume III, Method 21,
Regulation		Determination of Compliance of Volatile Organic
8-32-302		Compounds for Water Reducible Coatings or
		Manual of Procedures, Volume III, Method 22,
		Determination of Compliance of Volatile Organic
		Compounds for Solvent Based Coatings or
		Manual of Procedures, Volume III, Method 31,
		Determination of Precursor Organic Compounds in Paint
		Strippers for Aerospace Assembly and Component Coating
		Operations or
		Manual of Procedures, Volume III, Method 41,
		Determination of Volatile Organic Compounds in Solvent
		Based Coatings and Related Materials Containing
		Parachlorobenzotrifluoride

Facility Name: University of California, Berkeley Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

# VIII. Test Methods (continued)

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	VOC Limits - Custom	Manual of Procedures, Volume III, Method 21,
Regulation	Cabinetry and Architectural	Determination of Compliance of Volatile Organic
8-32-303	Millwork	Compounds for Water Reducible Coatings or
		Manual of Procedures, Volume III, Method 22,
		Determination of Compliance of Volatile Organic
		Compounds for Solvent Based Coatings or
		Manual of Procedures, Volume III, Method 31,
		Determination of Precursor Organic Compounds in Paint
		Strippers for Aerospace Assembly and Component Coating
		Operations or
		Manual of Procedures, Volume III, Method 41,
		Determination of Volatile Organic Compounds in Solvent
		Based Coatings and Related Materials Containing
		Parachlorobenzotrifluoride
BAAQMD	VOC Limits - Custom and	Manual of Procedures, Volume III, Method 21,
Regulation	Contract Furniture Limits	Determination of Compliance of Volatile Organic
8-32-304		Compounds for Water Reducible Coatings or
		Manual of Procedures, Volume III, Method 22,
		Determination of Compliance of Volatile Organic
		Compounds for Solvent Based Coatings or
		Manual of Procedures, Volume III, Method 31,
		Determination of Precursor Organic Compounds in Paint
		Strippers for Aerospace Assembly and Component Coating
		Operations or
		Manual of Procedures, Volume III, Method 41,
		Determination of Volatile Organic Compounds in Solvent
		Based Coatings and Related Materials Containing
		Parachlorobenzotrifluoride
BAAQMD	VOC Limits For Aerosol	Manual of Procedures, Volume III, Method 35,
Regulation	Products	Determination of Volatile Organic Compounds (VOC) in
8-49-301		Solvent Based Aerosol Paints and Adhesives, and
		Method 36, Determination of Volatile Organic Compounds
		(VOC) in Water Based Aerosol Paints.
BAAQMD	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide,
Regulation		Continuous Sampling, or
9-1-302		ST-19B, Total Sulfur Oxides Integrated Sample

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

# VIII. Test Methods (continued)

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Fuel Burning (Liquid and	Manual of Procedures, Volume III, Method 10,
Regulation	Solid Fuels)	Determination of Sulfur in Fuel Oils.
9-1-304		
BAAQMD	Performance Standard, NOx,	Manual of Procedures, Volume IV, ST-13A, Oxides of
Regulation	Gaseous Fuel	Nitrogen, Continuous Sampling and ST-14, Oxygen,
9-7-301.1		Continuous Sampling
BAAQMD	Performance Standard, CO,	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,
Regulation	Gaseous Fuels	Continuous Sampling and ST-14, Oxygen, Continuous
9-7-301.2		Sampling
BAAQMD	Performance Standard, NOx,	Manual of Procedures, Volume IV, ST-13A, Oxides of
Regulation	Non-gaseous Fuel	Nitrogen, Continuous Sampling and ST-14, Oxygen,
9-7-302.1		Continuous Sampling
BAAQMD	Performance Standard, CO,	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,
Regulation	Non-gaseous Fuels	Continuous Sampling and ST-14, Oxygen, Continuous
9-7-302.2		Sampling

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

## IX. GLOSSARY

## **BAAQMD**

Bay Area Air Quality Management District

### **BACT**

Best Available Control Technology

### CAA

The federal Clean Air Act

## **CAAQS**

California Ambient Air Quality Standards

### CEQA

California Environmental Quality Act

## **CFR**

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

### $\mathbf{CO}$

Carbon Monoxide

### **Cumulative Increase**

The sum of permitted emissions from each new or modified source since a specified date. Used to determine whether threshold-based requirements are triggered.

### **District**

The Bay Area Air Quality Management District

### **EPA**

The federal Environmental Protection Agency.

### Exempt

Not subject to the requirements of a regulation. Unless otherwise indicated applies only to Regulation 2, Rule 1, Sections 301 - Authority to Construct and 302 - Permit to Operate.

### Excluded

Not subject to any District Regulations.

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

## IX. Glossary (continued)

## Federally Enforceable, FE

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60, (NSPS), Part 61, (NESHAPS), Part 63 (HAP), and Part 72 (Permits Regulation, Acid Rain), and also including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

### **HAP**

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by both 40 CFR Part 63, and District Regulation 2, Rule 5.

### **Major Facility**

A facility with potential emissions of regulated air pollutants greater than or equal to 100 tons per year, greater than or equal to 10 tons per year of any single hazardous air pollutant, and/or greater than or equal to 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity as determined by the EPA administrator.

### **MFR**

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Act and implemented by District Regulation 2, Rule 6.

## **MOP**

The District's Manual of Procedures.

### NAAQS

National Ambient Air Quality Standards

### **NESHAPS**

National Emission Standards for Hazardous Air Pollutants. Contained in 40 CFR Part 61.

### **NMHC**

Non-methane Hydrocarbons

#### **NOx**

Oxides of nitrogen.

### **NSPS**

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Act, and implemented by both 40 CFR Part 60 and District Regulation 10.

### **NSR**

New Source Review. A federal program for preconstruction review and permitting of new

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

## IX. Glossary (continued)

and modified sources of air pollutants for which the District is classified "non-attainment". Mandated by Title I of the Clean Air Act and implemented by 40 CFR Parts 51 and 52 as well as District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

### **Offset Requirement**

A New Source Review requirement to provide federally enforceable emission offsets at a specified ratio for the emissions from a new or modified source and any pre-existing cumulative increase minus any onsite contemporaneous emission reduction credits. Applies to emissions of POC, NOx, PM10, and SO2.

## **Phase II Acid Rain Facility**

A facility that generates electricity for sale through fossil-fuel combustion and by virtue of certain other characteristics (defined in Regulation 2, Rule 6) is subject to Titles IV and V of the Clean Air Act.

#### POC

**Precursor Organic Compounds** 

#### PM

**Total Particulate Matter** 

## **PM10**

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

### **PSD**

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

### **SIP**

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

### SO<sub>2</sub>

Sulfur dioxide

### **TSP**

Total Suspended Particulate

## Title V

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

# IX. Glossary (continued)

program for major and certain other facilities.

## **VOC**

Volatile Organic Compounds

## **Units of Measure:**

bhp = brake-horsepower
Btu = British Thermal Unit
g = grams
gal = gallon
hp = horsepower

hr = hour lb = pound

in= inches

 $\begin{array}{llll} \text{max} & = & \text{maximum} \\ \text{m}^2 & = & \text{square meter} \end{array}$ 

 $\begin{array}{rcl}
\text{min} & = & \text{minute} \\
\text{MM} & = & \text{million}
\end{array}$ 

ppmv = parts per million, by volume ppmw = parts per million, by weight

psia = pounds per square inch, absolute psig = pounds per square inch, gauge scfm = standard cubic feet per minute

yr = year

Permit for Site #: A0059

Expiration Date: December 18, 2003

ID: EYC

# X. APPENDIX A - APPLICABLE STATE IMPLEMENTATION PLAN

See Attachments